## Amendments to the Claims

A complete list of pending claims follows:

1. (Previously Amended) Method of operating a computer system with a central processing unit and a memory system coupled to said central processing unit, said memory system comprising a plurality of memory module slots for receiving of memory modules, wherein each memory module comprises a random access memory section and a non-volatile memory section, said method comprising the steps of:

detecting a memory error;

analyzing said memory error, determining a memory module in which said error occurred and creating a log, wherein the log includes information identifying the cause of said error; and

storing said log in said non-volatile memory section of said memory module.

- 2. (Original) Method according to claim 1, wherein said memory error is detected during a diagnostic test.
- 3. (Original) Method according to claim 1, wherein said memory error is detected during normal operation.
  - 4. (Cancelled).
- 5. (Original) Method according to claim 1, wherein said log comprises information about the location of the memory module.

- 6. (Original) Method according to claim 1, wherein said log comprises information about the date and time when said error occurred.
- 7. (Original) Method according to claim 1, wherein said log comprises information about the system identification.
- 8. (Original) Method according to claim 1, wherein said log is stored in a cyclical manner.
  - 9. (Previously Amended) Computer system comprising:

a central processing unit;

a memory system coupled with said central processing unit comprising a plurality of memory module slots for receiving of memory modules, said memory module comprising a random access memory section and a non-volatile memory section;

means for detecting an error in said memory system;

means for generating a log about said error, wherein the log includes information identifying the cause of said error; and

means for storing said log in said non-volatile memory section of a memory module.

10. (Original) Computer system according to claim 9, wherein said means for detecting an error generate an exception within said central processing unit.

- 11. (Original) Computer system according to claim 9, wherein said non-volatile memory is divided in a plurality of sub sections each sub section storing one log.
- 12. (Original) Computer system according to claim 11, wherein said sub sections are written in a cyclical manner.
  - 13. (Cancelled).
- 14. (Original) Computer system according to claim 9, wherein said log comprises information about the location of the memory module.
- 15. (Original) Computer system according to claim 9, wherein said log comprises information about the date and time when said error occurred.
  - 16. (Original) Computer system according to claim 9, wherein said log comprises information about the system identification.
  - 17. (Previously Amended) Method of operating a module within a computer system comprising a non-volatile memory section, said method comprising the steps of:

detecting an error during an access to said module;

analyzing said error and creating a log, wherein the log includes information identifying the cause of said error; and

storing said log in said non-volatile memory section of said module.

- 18. (Original) Method according to claim 17, wherein said error is detected during a diagnostic test.
- 19. (Original) Method according to claim 17, wherein said error is detected during normal operation.
  - 20. (Cancelled).
- 21. (Original) Method according to claim 17, wherein said log comprises information about the location of the module.
- 22. (Original) Method according to claim 17, wherein said log comprises information about the date and time when said error occurred.
  - 23. (Original) Method according to claim 17, wherein said log comprises information about the system identification.
  - 24. (Original) Method according to claim 17, wherein said log is stored in a cyclical manner.

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25. (Previously Amended) Computer system comprising:a central processing unit;

at least one system module coupled with said central processing unit comprising a non-volatile memory section;

means for detecting an error in said system module;

means for generating a log about said error, wherein the log includes information identifying the cause of said error; and

means for storing said log in said non-volatile memory section of said system module.

- 26. (Original) Computer system according to claim 25, wherein said means for detecting an error generate an exception within said central processing unit.
- 27. (Original) Computer system according to claim 25, wherein said non-volatile memory is divided in a plurality of sub sections each sub section storing one log.
  - 28. (Original) Computer system according to claim 27, wherein said sub sections are written in a cyclical manner.
    - 29. (Cancelled).
  - 30. (Original) Computer system according to claim 25, wherein said log comprises information about the location of the system module.

- 31. (Original) Computer system according to claim 25, wherein said log comprises information about the date and time when said error occurred.
- 32. (Original) Computer system according to claim 25, wherein said log comprises information about the system identification.

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